

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1.-13. (Canceled)

14. (New) A patch image preparation method for preparing a patch image, comprising:

a setting step, of setting kinds of patches included in the patch image in response to an instruction by a user;

a selection step, of selecting an arrangement patch from the patches set in said setting step;

a determination step, of determining an arrangement nonpermission area of the arrangement patch; and

an arrangement step, of arranging the arrangement patch in an area other than the arrangement nonpermission area,

wherein said patch image preparation method causes execution of said selection step, said determination step, and said arrangement step to all the patches set in said setting step.

15. (New) The patch image preparation method according to claim 14, wherein the arrangement nonpermission area includes an area in which the patch has

already been arranged and an area which is set based on a patch highly correlated with the arrangement patch and which highly correlates with the arrangement patch.

16. (New) The patch image preparation method according to claim 15, wherein the area which highly correlates with the arrangement patch is an area which has predetermined widths, respectively, in a main scan direction and a sub scan direction.

17. (New) The patch image preparation method according to claim 14, wherein,

said setting step includes setting a number of same patches to be arranged, and

said patch image preparation method includes repeating said selection step, said determination step, and said arrangement step on the basis of the number set in said setting step.

18. (New) The patch image preparation method according to claim 14, wherein, when the arrangement patch cannot be arranged in the area other than the arrangement nonpermission area, the arrangement patch is arranged within the arrangement nonpermission area.

19. (New) A program for performing, by a computer, a patch image preparation method for preparing a patch image, said method comprising:

a setting step, of setting kinds of patches included in the patch image in response to an instruction by a user;

a selection step, of selecting an arrangement patch from the patches set in said setting step;

a determination step, of determining an arrangement nonpermission area of the arrangement patch; and

an arrangement step, of arranging the arrangement patch in an area other than the arrangement nonpermission area,

wherein said patch image preparation method causes executing said selection step, said determination step, and said arrangement step to all the patches set in said setting step.

20. (New) A patch image preparation apparatus for preparing a patch image, comprising:

a setting unit, adapted to set kinds of patches included in the patch image in response to an instruction by a user;

a selection unit, adapted to select an arrangement patch from the patches set by said setting unit;

a determination unit, adapted to determine an arrangement nonpermission area of the arrangement patch; and

an arrangement unit, adapted to arrange the arrangement patch in an area other than the arrangement nonpermission area,

wherein said patch image preparation apparatus causes said selection unit, said determination unit, and said arrangement unit to operate with respect to all the patches set by said setting unit.